

## **Conservation Security Program**

**Water Quality Benchmark** 

Minnesota, 2005

#### **CSP Benchmark Water Quality Practices**

Place an "X" in the appropriate box next to each question. An "X" indicates "Yes"

<b>1</b> . All sites associated with crop or livestock production other than fields or pastures (e.g. feedlots, storage sites etc) are protected from erosion caused by concentrated water (No noticeable channels greater than 6 inches in depth).
2. Fertilizer and pesticides are stored, handled, mixed and loaded to prevent well or surface water contamination. Unused or empty containers are disposed of properly.
<ul> <li>All pesticide and liquid fertilizer containers are clearly labeled and stored in fenced areas separate from most other activities. The storage site(s) have impermeable surfaces and curbs installed to contain leaks and spills</li> </ul>
<ul> <li>Anti-back-flow devices are installed on water supplies used to mix chemicals</li> </ul>
<ul> <li>Separation distances required by state law are maintained between water supply and mixing and loading site. Mixin and loading occurs at least 150 feet or more downslope from wells.</li> </ul>
<ul> <li>Triple-rinsed pesticide containers returned to dealers or taken to permitted landfill or municipal incinerator. Or Empty bags disposed of at permitted landfills or incinerated if allowed by state and local authorities.</li> </ul>
<ul> <li>Pesticide sprayer washed out in field or on pad at farmstead. Rinsate used in next load and applied to labeled crop.</li> </ul>
3. Hazardous wastes used in production activities are stored and disposed of in a safe manner. These wastes include building/wood maintenance products and vehicle /metal equipment maintenance products.
<ul> <li>Paints, adhesives, thinners, strippers, solvents, rust removal products are used up or taken to hazardous waste collection service or empty containers taken to permitted landfills.</li> </ul>
<ul> <li>Waste oil and grease and used antifreeze disposed of at recycling or collection services.</li> </ul>
4. Petroleum products are stored in a safe manner.
<ul> <li>Tanks are made synthetic material or protected from rust and located downslope from wells, and on an impermeable catch basin having automatic shutoff or overfill alarm.</li> </ul>
o Tanks are monitored monthly for leaks
5. Wastewater from production areas does not discharge into drainage ditches or other conduits to ground or surface waters.
<ul> <li>This section applies to milkhouse wastes or wastes from bathrooms located in production sites (not household wastewater)</li> </ul>
<b>6</b> . Manure and other animal by-products are stored in a manner that prevents pollution including livestock yards. All pertinent state laws are complied with.
<ul> <li>Feedlot is registered as required by state law.</li> </ul>
<ul> <li>All practices needed to comply with open-lot agreement requirements (if you have one) will be installed by October 2005.</li> </ul>
<ul> <li>Runoff from your lots is not considered a pollution source.</li> </ul>
<ul> <li>Seepage into the soil from stored manure meets state law requirements.</li> </ul>
<ul> <li>Stored manure does not discharge to surface waters or if so meets state law 0 pollution standards.</li> </ul>
<ul> <li>Manure that is stockpiled meets MPCA stockpiling requirements</li> </ul>
<ul> <li>Leachate from stored silage does not move into groundwater or surface waters</li> </ul>
Mortalities are disposed of in accordance with state law.
<ul> <li>Required setbacks between on-site wells and manure storage areas are met.</li> </ul>
<ul> <li>Required setbacks between manure storage areas and off-site public or community wells are met.</li> </ul>

Livestock from non-CAFOs are excluded from natural environment, recreational or general development lakes.

Livestock from CAFOs are excluded from waters of the state.

Livestock access to permanent streams is controlled via fencing and crossings.



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	7. Commercial fertilizer and manure is applied with calibrated applicators
	8. Do you have manure test results from an MDA certified lab that are 1 year old or newer and do you have these for every manure source of 15 or more animal units?
	<b>9.</b> Are your current soil test results from MDA certified labs and do you have at least 1 test result per 10 acres on fields with complex terrain or 1 test per 40 acres on fields with simple terrain
	10. Abandoned wells in fields and pastures are properly sealed.
CSP	Applicant's Name Date

**Water Quality Benchmark** 

Retain all permits and other information that verifies your answers to the above questions. This information will be requested from you if you are audited. It is advised that applicants contemplating Tier III complete the Farm\*A\*Syst self assessment packet available from the Minnesota Extension Service. This packet evaluates the potential water quality impact of your current production site practices. Retain the self-assessments in the event you are spot-checked by NRCS. We will review the completed worksheets without copying them and return them to you. The packet is available and can be ordered from the following URL:

http://www.extension.umn.edu/units/dc/item.html?item=05696

For information on state law requirements related to feedlots, click on the following URL:

http://www.pca.state.mn.us/hot/feedlots.html

For information on pesticide container disposal click on the following URLs:

http://www.pestlaw.com/x/notice/epa/pr83-3.html

http://www.mda.state.mn.us/appd/bmps/bmps.htm#generalbmps

For information on mortality disposal click on the following URL:

http://www.bah.state.mn.us/animals/carcass%20disposal/carcass disposal.htm

For information on isolation distances between water supply wells and other activities or features click on the following URL:

http://www.health.state.mn.us/divs/eh/water/ncom/mmappendixag.pdf

# CSP Benchmark Cropping History and Soil Fertility Inventory

#### **Normal Crop Rotations and Yields**

Complete the "Rotation & Tillage Benchmark Inventory Sheet"

Soil Test Results										
	Complete for j	fields with s	soil tes	t results f	rom a Minn	. Dept. o	f Agricultu	re Certified	Lab.	
Field	Sample Date	Organic Matter	рН	Buffer	N	P	K		ther Nutries	
		(%)		Index	Lbs./ac.	PPM	PPM	PPM	PPM	PPM
				Date						
				Daio						

# Conservation Security Program (CSP) Benchmark Water Quality Nutrient and Pest Management

Producer		Da	ite						
Tract Field(s)			Crop Rotation						
Crop /	Previous	Nutrient Source	Timing <sup>1</sup>	Method <sup>2</sup>	Application Rate <sup>3</sup>	Analysis <sup>4</sup>			
Yield Goal	Crop / Yield or Quality	Manure or Commercial Fertilizer	Ü		Pounds or Gallons or Tons per Acre	N	$P_2O_5$	K <sub>2</sub> O	
Corn	Corn								
Corn	Soybeans								
Corn	Alfalfa								
Corn									
Corn									
Soybeans									
								•	
Alfalfa									
	Ι					Ι		1	
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	_								

#### **Comments:**

- 1. For Example: Fall Pre-Plant, Spring Pre-plant, Planting
- 2. For Example: Broadcast (BC), Knife, Starter in Row, and Sidedress for fertilizer; and broadcast incorporate or no incorporate or sweep or knife inject for manure
- 3. Rate is product rate and not rate of N,  $P_2O_5$  or  $K_2O$ .
- 4. Analysis is % for commercial fertilizer and lbs./ton or 1000 gal. for manure

3 For Example Broadcast, Band

	Bencl	Conservation	n Security Prog ality Nutrient a		agement	
Producer		Farm	<u> </u>		Date	
Tract		l .	Field(s	<u> </u>		
Crop	Target Pest(s) (Weeds, Insects, Disease, Etc.)	Product(s) Used and Other Controls <sup>1</sup>	Formulation	Timing <sup>2</sup>	Method <sup>3</sup>	Application Rate (per acre)
Corn						
Corn						
Corn						
Corn						
Combooms			I		1	
Soybeans						
Soybeans						
Alfalfa						
C						
Comments:	Herbicides, Insecticides	Cron cultivation Potar	m hoging Flame was	odina		
2 For Example.	Spring Pre-plant, Plant	ing, Pre-emerge, Post-ei	ny noeing, Piame wee merge	umg		

	Manure Source #1	Manure Source #2	Manure Source #3	Example
				Dairy Barn
Livestock Information				
Species				1400 lb. Dairy Cow
Annual Number				50
Species				Dairy heifers
Annual Number				7
Storage Information				
Storage Type				Above ground tank
Capacity				500000 gallons
Storage Length				6 months
Application Information				
Handling Method				Liquid
Commercial Hauler				No
Spreader Type <sup>1</sup>				Balzer slurry tanker
When Applied <sup>2</sup>				Spring and fall
Application Method <sup>3</sup>				Knife inject
Incorporation Timing <sup>4</sup>				Immediate
Spreader Calibrated				Yes
Normal (n) or Calibrated ©				11000 gal./ac. ©
Application Rate  Manure Analysis from a  Mn. Dept. of Ag. Certified  Lab				
Date Analyzed				10/99
N				24
$P_2O_5$				18
K <sub>2</sub> O				29
Date Analyzed				
N P.O.				
P <sub>2</sub> O <sub>5</sub> K <sub>2</sub> O				-
11/20				

"Acres Covered" are average acres covered when the storage system is emptied after an average storage time interval.